Legs #12ZG-1.50"-1.00" conn. (Pirod 207629) #12ZG-1.50"-1.00" conn. (Pirod 207629) SR 2 1/4 SR 2 1/4	Share #122G - 1.50° - 1.00° conn. (Pirod 207629) #122G - 1.25° - 1.00° conn. (Pirod 207628) SR 2 1/4	Section 113	T13	112	141	-	T10		T9	18		П	TG	TS		- 4	74	T4 T3	
1893616	20 18 16 19 10 089 1 16 19 19 10 081	sbe		#12ZG-1.	50" - 1.00" conn	. (Pirod 20	7629)		100000	#12ZG	- 1.25" - 1.0	0" ∞nn. (Pire	od 207628)	SR21		4	4 SR2		SR2
190.09t 13x3x3/16	20	eg Grade					800 1100 1100 1100	388 - 111 - 111 - 1882 - 1884			A572-	90		10 May 10					
160.0 ft	100.08		3x5/16	L3x3	x3/16					L2 1/2x2 1/2x3	16			SR 7/	00		SR	SR 3/4	SR 3/4 SR 5/8
NA. NA. NA. NA. NA. NA. NA. NA.	NA. NA. NA. NA. NA. NA. NA. NA.)lagonal Grade						A36										A572-50	A572-50
284 1 100.0 ft	NA. NA. NA. NA. NA. NA. NA. NA.	op Girts					N.A.						L3x3x3/16	SR1				SR 7	SR 7/8
28	28 140.0 ft 100.0 ft 140.0 ft 150.0 ft 140.0 ft 150.0 ft	Aid Girts						N.A.	à					SR 1			SR	SR 7/8	SR 7/8
100.0 ft	140.0 ft 140.0 ft 120.0 ft 140.0 ft 100.0 ft 100.0 ft 22 40.0 ft 41 40.0 ft 41 40.0 ft 41 40.0 ft 41 41 41 41 41 41 41 41 41 4	Sottom Girts						N.A.						SR 1				SR7	SR 7/8
9 160.0 ft 9 140.0 ft 9 120.0 ft 100.0 ft 9 80.0 ft 9 40.0 ft 2 20.0 ft 8 20.0 ft	180.0 ft 180.0 ft 140.0 ft 120.0 ft 120.0 ft 80.0 ft 40.0 ft 2 20.0 ft 2 20.0 ft 2 20.0 ft	lorizontals						N.A.										SR 3/4	SR 3/4
160.0 ft 140.0 ft 140.0 ft 120.0 ft 30.0 ft	180.0 ft 180.0 ft 140.0 ft 120.0 ft 8 80.0 ft 8 80.0 ft 8 20.0 ft 8 20.0 ft 8 20.0 ft		18	16		14		12	10		80	9							
160.0 ft 140.0 ft 120.0 ft 80.0 ft 40.0 ft 22 20.0 ft 23 20.0 ft	180.0 ft 140.0 ft 120.0 ft 100.0 ft 3 80.0 ft 40.0 ft 2 20.0 ft 3 20.0 ft	Panels @ (ft)						16 @ 10									32 @ 2	32 @ 2.38021	32 @ 2.38021
160.0 ft 140.0 ft 120.0 ft 40.0 ft 40.0 ft	160.0 ft 140.0 ft 120.0 ft 100.0 ft 40.0 ft	23.9	3.3	2.7	2.6		2.4		23	6.1		1,9	1.0	1.5			2	1.1	
		0.0 ft	20.0 ft		40.0 ft	60.0 ft		80.0 ft		100.0 ft	120.0 ft		140.0 ft	160.0 ft	180.0 ft			200.0 ft	220.0 ft

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Beacon	252	17'crossarm w/ 2 devices	245
1/2" x 4' lightning rod	252	17'crossarm w/ 2 devices	195
10' Goal Post w/ 2 devices	252	17'crossarm w/ 2 devices	137

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

- Tower is located in Tippecanoe County, Indiana.
 Tower designed for Exposure C to the TIA-222-G Standard.
- 3. Tower designed for a 90 mph basic wind in accordance with the TIA-222-G Standard.
- 4. Tower is also designed for a 40 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
- 5. Deflections are based upon a 60 mph wind.
- 6. Tower Structure Class II.
- 7. Topographic Category 1 with Crest Height of 0.00 ft 8. TOWER RATING: 67.3%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 149 K UPLIFT: -125 K SHEAR: 15 K

AXIAL 137 K SHEAR MOMENT 8K / 1146 kip-ft

TORQUE 2 kip-ft 40 mph WIND - 1.0000 in ICE AXIAL

30 K MOMENT SHEAR 21 K 2402 kip-ft

TORQUE 5 kip-ft REACTIONS - 90 mph WIND



1545 Pidco Dr. Plymouth, IN

Quotation 202886-02 Project: *U-20.0 x 252' - Tippecanoe County, IN*Client: Wind Energy Services Drawn by: WRH2 App'd: Code: TIA-222-G Date: 12/06/13 Scale: NTS Dwg No. E-1

Valmont Structures, Inc. - Specialty Structures Group Phone: (574) 936-4221

FAX: (574) 936-6458

Path: